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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/645,100	08/21/2003	Junichi Rekimoto	09812.0357-00000	7279

			EXAMINER
22852	7590	01/04/2006	LUI, DONNA V

FINNEGAN, HENDERSON, FARABOW, GARRETT & DUNNER LLP
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WASHINGTON, DC 20001-4413

ART UNIT	PAPER NUMBER
2675	

DATE MAILED: 01/04/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

PTO-90C (Rev. 10/03)

<table>
<tr><td rowspan="2">Office Action Summary</td><td>Application No.
10/645,100</td><td>Applicant(s)
REKIMOTO, JUNICHI</td></tr>
<tr><td>Examiner
Donna V. Lui</td><td>Art Unit
2675</td></tr>
</table>

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *16 September 2005*.

2a)☐ This action is **FINAL.**   2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-16* is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-5,8-12,15 and 16* is/are rejected.

7)☒ Claim(s) *6,7,13 and 14* is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☒ All   b)☐ Some * c)☐ None of:

      1.☒ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____.

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)

2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
    Paper No(s)/Mail Date _____.

4) ☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date. _____.

5) ☐ Notice of Informal Patent Application (PTO-152)

6) ☐ Other: _____.

DETAILED ACTION

Priority

1.   Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers

have been placed of record in the file.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis

for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2.   **Claims 1-6, 8-13, 15, and 16** are rejected under 35 U.S.C. 102(b) as being anticipated by

Baker et al. (Patent No.: 5,920,303).

With respect to **Claim 1**, Baker discloses an information processing unit for executing

predetermined processing in response to a user input *(See figure 3)*. Baker teaches the

information processing unit to comprise a key input section *(element 2)* provided with a plurality

of keys *(element 3; column 11, lines 26-28)*, for inputting data assigned to a pressed key; a

coordinate input section *(element 7; column 12 lines 1-2)* for performing a coordinate input

according to a user's finger contact operation; and key-assignment control means *(See figure 1;*

element 4; column 17, lines 19-23) for changing key assignment in the key input section *(Note*

that there exists a one to one correspondence of the virtual keyboard (7) to the keyboard (2),

since this relationship exists the redefining of a virtual key leads to a redefining of a key (3) in

the keyboard (2); column 22, lines 33-39) according to the result of detection of a user's finger

contact, obtained by the coordinate input section.

With respect to **Claim 8**, Baker discloses a control method for an information processing

unit provided with a key input section *(See figure 1; element 2)* and a coordinate input section

(element 7), for performing an operation according to a user input operation. Baker teaches the

method to comprise a step of determining whether a user operation has been performed for the

key input section *(column 13, lines 32-35)*, a step of detecting the contact of a user's finger on

the coordinate input section *(column 12, lines 7-13)*, a step of performing a process according to

the position of the contact of the user's finger on the coordinate input section *(Note that the*

preformed process is the redefining of a virtual key; column 12, lines 31-34), and a step of

interpreting the user operation performed for the key input section according to whether or not

the contact of the user's finger on the coordinate input section has occurred *(Note that there*

exists a one to one correspondence of the virtual keyboard (7) to the keyboard (2), since this

relationship exists the redefining of a virtual key leads to a redefining of a key (3) in the

keyboard (2), thus the step of interpreting the user operation performed for the key input section

is equivalent to processing signals due to the depression of a key (3) in the keyboard (2) after a

virtual key has been redefined; column 22, lines 33-39).

With respect to **Claim 15**, Baker discloses a computer program having described, in a

computer readable format, an operation performed to a user input operation *(column 39, lines 23-*

28). Claim 15 differs from claim 8 only in that claim 8 is a method and claim 15 is a computer program. Thus Claim 15 is analyzed as previously discussed with respect to claim 8.

With respect to **Claim 16**, Baker discloses an information processing method for executing predetermined processing in response to a user input *(column 25, lines 8-14)*. Baker teaches the information processing method to comprise steps of receiving key input information according to user's key input operation on key input means *(column 13, lines 32-35)*, receiving coordinate input information according to user's finger contact operation on coordinate input means *(column 12, lines 7-13)*; recognizing the user input based on the received key input and coordinate input information *(Note that since activation of a key is through the virtual keyboard (7) or keyboard (2) and redefining a key is through either a one or two symbol sequence then the redefining can be based on the received key input from keyboard (2) and coordinate input of the virtual keyboard (7); column 18, lines 49-53; column 18, lines 28-33)*, wherein the key assignment of the key input information being changed when the received coordinate input information is in predefined state *(Note that the predefined state are symbol sequences pre-stored in memory (6); column 18, lines 28-30)*; and executing the processing in response to the recognized user input *(column 16, lines 5-6 and lines 10-13)*.

With respect to **Claim 2**, Baker teaches the key-assignment control means to apply key assignment for usual key input operations to each key of the key input section while the coordinate input section does not detect the contact of a user's finger *(Note that key activation is through either the keyboard (2) or virtual keyboard (7), thus key input operations are*

accomplished when only the keyboard (2) is used and the virtual keyboard (7) remains unused;

column 18, lines 49-53), and changes key assignment to a specific key of the key input section in

response to the fact that the coordinate input section has detected the contact of a user's finger

(Note that since the redefining of a key may be accomplished through a two symbol sequence

then the redefining can be based on the received key input from keyboard (2) preceding the

coordinate input of the virtual keyboard (7); column 18, lines 49-53; column 18, lines 28-33).

With respect to **Claim 3**, Baker teaches the key-assignment control means to assign a

function for designating an input-coordinate selection operation to a home-position key in the

key input section in response to the fact that the coordinate input section has detected the contact

of a user's finger *(Note that the ZEBRA symbol may first be selected from the keyboard (2) and*

the next selection of the FATHER TIME symbol is from the virtual keyboard (7); figure 5 shows

the keyboard layout prior to the redefining of keys and figure 6 shows the redefined keys where

the home position keys F and J are changed to the triceratops and euoplocephalus symbols

respectively; column 19, lines 39-45; column 20, lines 47-55 and lines 61-64).

With respect to **Claim 4**, Baker teaches the key-assignment control means to assign a

menu selection function or another function to a key in the key input section in response to the

fact that the coordinate input section has detected the contact of a user's finger *(column 12 lines*

55-58; Note that the reference recites that the symbol sequences can be functions or any

combination thereof; this may also include menu selection functions; further note that since the

redefining of a key may be accomplished through a two symbol sequence then the redefining can

be based on the received key input from keyboard (2) preceding the coordinate input of the

virtual keyboard (7); column 18, lines 49-53; column 18, lines 28-33).

With respect to **Claim 5**, Baker teaches the coordinate input section to determine that a

user's finger has contacted, according to the fact that the user's finger was detected within a past

predetermined period. It is inherently known that the user's finger was detected within a past

predetermined period since an interval of time must be set for any signal receiving processor to

receive the next signal for detection from the same or another key.

With respect to **Claims 9-12**, claims 9-12 differ from claims 2-5 only in that claims 2-5

are an information processing unit whereas claims 9-12 are a step of a control method. Thus

claims 9-12 are analyzed as previously discussed with respect to claims 2-5.

Allowable Subject Matter

3.   **Claims 6-7 and 13-14** are objected to as being dependent upon a rejected base claim, but

would be allowable if rewritten in independent form including all of the limitations of the base

claim and any intervening claims.

With respect to **Claim 6**, none of the prior art teaches an information processing unit

further comprising designated-area storage means for storing the content of a designated area in

response to the fact that the coordinate input section designates the area while a predetermined

key is being pressed in the key input section and that the predetermined key is then released.

With respect to **Claim 13**, none of the prior art teaches a control method for the information processing unit further comprising a designated-area storage step of storing the content of a designated area in response to the fact that the coordinate input section designates the area while a predetermined key is being pressed in the key input section and that the predetermined key is then released.

Conclusion

4.   The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Ford (Pub. No.: 2004/0036632) is cited to teach a keyboard system with mode changing capabilities for altering the character sets. The character and function keys may be implemented with key-pads.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Donna V. Lui whose telephone number is (571) 272-4920. The examiner can normally be reached on Monday through Friday 8:30 a.m. - 5:00 p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Sumati Lefkowitz can be reached on (571) 272-3638. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent

Application Information Retrieval (PAIR) system. Status information for published applications

may be obtained from either Private PAIR or Public PAIR. Status information for unpublished

applications is available through Private PAIR only. For more information about the PAIR

system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR

system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Donna V Lui
Examiner
Art Unit 2675

**KENT CHANG
PRIMARY EXAMINER**